Numeracy Framework

Year 4

Identify processes and connections

- transfer mathematical skills to a variety of contexts and everyday situations
- identify the appropriate steps and information needed to complete the task or reach a solution
- select appropriate mathematics and techniques to use
- select and use suitable instruments and units of measurement
- choose an appropriate mental or written strategy and know when it is appropriate to use a calculator
- estimate and visualise size when measuring and use the correct units

Represent and communicate

- explain results and procedures clearly using mathematical language
- refine informal methods of recording written calculations, moving to formal methods of calculation when developmentally ready
- use appropriate notation, symbols and units of measurement
- select and construct appropriate charts, diagrams and graphs with suitable scales

Review

- select from an increasing range of checking strategies to decide if answers are reasonable
- interpret answers within the context of the problem and consider whether answers, including calculator displays, are sensible
- draw conclusions from data and recognise that some conclusions may be misleading

I am able to (use number skills to)...

- read and write numbers to 10 000
- compare and estimate with numbers up to 1 000
- use a range of mental strategies to recall multiplication tables for 2, 3, 4, 5, 6 and 10 and use to solve division problems
- multiply and divide numbers by 10 and 100
- halve 3-digit numbers in the context of number, money and measures
- find fractional quantities using known table facts, e.g. $^{1}/_{6}$ of 30cm
- recognise fractions that are several parts of a whole, e.g. $^{2}/_{3}$, $^{3}/_{10}$
- find differences within 1 000
- add a 2-digit number to, and subtract a 2-digit number from, a 3-digit number using an appropriate written method
- multiply and divide 2-digit numbers by a single digit
- check answers using inverse operations
- estimate by rounding to the nearest 10 or 100
- use money to pay for items up to £10 and calculate the change
- order and compare items up to £100
- add and subtract decimal numbers in the context of money (total less than £10)

I am able to (use measuring skills to)...

- measure on a ruler to the nearest mm and record using a mix of units, e.g. 1cm 3mm
- use scales to weigh objects to the nearest 5g, 10g, 25g or 100g (divisions marked)
- measure capacities to the nearest 50ml or 100ml
- convert metric units of length to smaller units, e.g. cm to mm, m to cm, km to m
- tell the time to the nearest minute on analogue clocks
- read hours and minutes on a 24-hour digital clock
- use stopwatches to time and order events in seconds
- use calendars to plan events
- take temperature readings using simple labelled thermometers and interpret readings above and below 0°C

I am able to (use data skills to)...

- represent data using:
  - simple lists, tally charts, tables and diagrams
  - bar and bar line graphs labelled in 2s, 5s and 10s
  - pictograms where one unit represents more than one object using simple key
  - Venn and Carroll diagrams
- extract and interpret information from simple charts, timetables, diagrams and graphs.